UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
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RE: Comments on the Notice of Intent to Prepare and EIS on the Cape Wind Project

The National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS) has reviewed the May 30, 2006 Federal Register Notice of Intent (NOI), which indicates a Draft Environmental Impact Statement (DEIS) will be prepared by the Department of the Interior's Minerals Management Service (MMS) for the proposed Cape Wind Project. It should be noted that NMFS provided extensive comments and served as a cooperating agency for the development of the Army Corps of Engineers (Corps) DEIS for the Cape Wind project.

The proposed project would construct and operate a wind park within Federal waters 4.7 miles offshore Cape Cod, Massachusetts. The purpose of the proposed project is to provide a utility-scale wind energy facility providing power to the New England power grid. Cape Wind Associates proposes to build 130 wind turbine generators (WTGs) on Horseshoe Shoal in Nantucket Sound. Each WTG would be mounted on a single 16-18 foot diameter monopile. The WTGs would be constructed in a grid pattern within an area of approximately 24 square miles. Each WTG would be connected by a 33 kilovolt (kV) submarine cable to an electric service platform (ESP). The ESP would transform and transmit alternating current electricity to shore through two 115 kV submarine cables. The maximum potential electric output is expected to be 454 megawatts (MW) distributed to the power grid on shore. In order to identify and address potential impacts to fishery resources and habitats as well as foreseeable impacts to existing commercial and recreational fishing activities, NMFS offers the following comments for the development of the DEIS.

Essential Fish Habitat assessment

Due to the potential for substantial adverse effects on Essential Fish Habitat (EFH) from the proposed project, an expanded EFH assessment under the federal review process should be included within the DEIS. This is a separate review mandated pursuant to the terms of the Magnuson Stevens Fishery Conservation and Management Act (16 USC 1855), although the MMS may use the DEIS as the vehicle within which to present the EFH assessment. The required contents of an expanded EFH assessment include: a description of the action; an analysis of the potential adverse effects of the action on EFH

and the managed species; the federal action agency's conclusions regarding the effects of the action on EFH; and proposed mitigation, if applicable. Other information that should be contained in the EFH assessment, if appropriate, includes: the results of on-site inspections to evaluate the habitat and site-specific effects; the views of recognized experts on the habitat or the species that may be affected; a review of pertinent literature and related information; and an analysis of alternatives to the action that could avoid or minimize the adverse effects on EFH.

Need for utility scale

As stated in the NOI, the purpose of the proposed project is to provide a "utility scale" renewable energy facility. The need for a "utility scale" project limits the analysis of a range of reasonable alternatives. The alternative to have small, distributed power generation facilities collectively adding a comparable amount of energy should be examined fully within the DEIS.

Analysis of site alternatives

The NOI notes that only offshore alternatives would be analyzed within the DEIS, and does not include upland or nearshore sites. While NMFS acknowledges that MMS authority exists solely within Federal waters, this artificially limits the reasonable range of alternatives to be analyzed within the DEIS. In our view, the fact that the applicant has proposed a project location within MMS jurisdiction, should not limit the range of alternatives solely to Federal waters. In order to fully analyze a reasonable range of alternatives as required by NEPA, nearshore and upland locations should be considered.

Fishery resources and habitats within the project area

The DEIS should fully characterize NMFS trust resources which may be adversely affected by the proposed project. This characterization should account for fishery resources, shellfish resources, and habitats located within the proposed project area. While the Corps DEIS contained commercial and recreational finfish data from NMFS and Massachusetts Division of Marine Fisheries (MADMF) surveys, this characterization was not based upon site-specific, fishery-independent finfish and shellfish resource sampling. Moreover, the use of landings data limits the evaluation to Federal and state managed species and does not account for forage species.

Temporary impacts from placement of cables within Lewis Bay and Nantucket Sound

The substrate within the proposed project area contains several areas of short and long period sand waves. Finfish resources utilize biogenic depressions and sand ridges for refuge and shelter and loss of these habitats can affect fish energy requirements. NMFS maintains that installation of submarine cables, inner-array cables, monopiles and the ESP, can adversely affect sand wave habitat. Loss of this sand ridge structure habitat can impact the forage base for larger fishery resources in the area. While recovery is expected to occur within this dynamic environment, studies have shown that recovery may be prolonged for up to one year. The lost functions and values of this habitat, from initial impact to the time of full recovery to pre-construction contours, are important to understand. The DEIS should analyze the anticipated effects of these temporary losses of habitat and the anticipated time period for recovery. For impacts that cannot be avoided,

compensatory mitigation for lost functions and values for temporary impacts should be presented within the DEIS.

Foreseeable impacts to winter flounder within Lewis Bay

According to the project description in the Corps DEIS, the 115kV submarine transmission cable will transit Lewis Bay. According to the Corps DEIS, the cable would utilize horizontal directional drilling (HDD) for a portion of the alignment in order to avoid coastal resource areas. In order for a transition from HDD to jet plow to occur, the applicant has proposed to install a cofferdam and excavate a pit within an area of 2,925 square feet of winter flounder habitat. Furthermore, the jet-plow activity seaward of the HDD exit point will continue through Lewis Bay for a distance of over one mile. As suspended sediment resulting from the jet plow activity has the potential to adversely affect winter flounder spawning and juvenile development in the area, impacts should be adequately characterized within the DEIS and efforts to avoid and minimize impacts should be discussed further.

Eelgrass

The extent of eelgrass within Lewis Bay should be described within the DEIS. Eelgrass beds have been designated as a unique category of EFH, Habitat Area of Particular Concern (HAPC), for summer flounder by the Mid-Atlantic Fishery Management Council. In addition, eelgrass beds have been designated by the US Environmental Protection Agency as "special aquatic sites" pursuant to section 404(b)(1) of the Federal Clean Water Act, due to their important role in the marine ecosystem. In order to ensure protections of eelgrass from cable activities, the extent of the bed should be delineated, and steps should be taken to avoid adverse effects resulting from direct impacts as well as from suspended sediment loading.

Permanent impact to benthic habitats from WTG's and scour mats

According to the project description within the Corps DEIS, the benthic footprint of the wind towers and associated scour mats will be 0.68 acres and 2.53 acres, respectively. These structures represent a permanent impact of 3.21 acres of benthic substrate. Compensatory mitigation for this permanent impact should be described within the DEIS.

Foreseeable impacts to fishing activities

NMFS remains concerned that the proposed project has the potential to adversely affect bottom tending fishing activities within the wind park due to the uncovering of cables. Should the inner array of cables become exposed, or move towards the surface, commercial fishing activities may be excluded from the area due to potential conflicts with trawls and other bottom-tending fishing gear. The DEIS should include a discussion of the proposed burial depths as well as an analysis of anticipated scour resulting from a range of weather conditions, including extreme conditions.

Impacts to commercial fishing vessel navigation

The DEIS should address potential impacts to fishing vessels utilizing the proposed project area. Of specific concern is that vessels utilizing trawl gears within the project area will be forced to maneuver throughout the wind park. Fishing vessels that attempt to

maneuver in alternate courses may be impacted and efficiency may be reduced. The DEIS should include an assessment of fishing gears utilized in the area, lengths of nets and lines, anticipated tow speeds, etc., to determine any adverse impacts to commercial fishing navigation.

Decommissioning of the wind park

The DEIS should include a discussion of impacts relating to the removal of cables and structures during decommissioning. In addition, the DEIS should include analysis of issues, both positive and negative, associated with leaving the structures/cables in place.

Monitoring of fishery impacts

The DEIS should include a discussion of a biological monitoring plan. Based on our concern regarding recovery of the substrate upon completion of construction, a biological monitoring plan should be presented within the DEIS. The monitoring plan should include contingencies should the anticipated recovery not occur. NMFS looks forward to coordinating with MMS and the applicant on the development of such a monitoring plan.

Compensatory mitigation

The DEIS should include a discussion of compensatory mitigation for unavoidable impacts resulting from the construction, operation and decommissioning of the wind park. While NMFS recommends that the applicant avoid and minimize adverse effects to EFH to the maximum extent practicable, compensatory mitigation may be required to offset permanent and temporary impacts on fisheries habitats. In our view, temporary and permanent adverse impacts on fishery habitats, resources and activities may occur during all phases of the proposed project. Temporary loss of functions and values – from the time of initial impact to the time of full recovery – are typically offset by compensatory mitigation. As stated above, the DEIS should analyze the anticipated effects and anticipated recovery times for marine fishery habitats. For impacts that cannot be avoided, compensatory mitigation for impacts should be proposed within the DEIS.

Cumulative effects

The DEIS should include a robust cumulative effects analysis for the proposed project. This analysis should describe the effects of the proposed project, in combination with any past, present, and reasonable foreseeable future actions, which may result in cumulative impacts on the ecosystem. Specifically, the cumulative effects analysis should include other existing, proposed, or planned energy infrastructure project within the area, and should address fishing exclusion areas and their additive effects on fishing activities, as well as the additive effects on the impacted species.

Endangered Species Act and Marine Mammal Protection Act

NMFS Protected Resources Division (PRD) oversees programs for species listed under the Endangered Species Act of 1973, as amended (ESA) and the Marine Mammal Protection Act (MMPA). Several federally listed species of whales and sea turtles are known to occur seasonally in the waters off of New England. Federally endangered Northern right whales (*Eubalaena glacialis*) and humpback whales (*Megaptera*

novaeangliae) are found seasonally in New England waters. North Atlantic right whales have been documented in the nearshore waters of Massachusetts from December through June and are likely to be present in Cape Cod Bay from December 15 – April 15 and Great South Channel from March 1 – June 30. Humpback whales feed during the spring, summer, and fall over a range that encompasses the eastern coast of the United States. Humpback whales are found off the coast of Massachusetts from March 15 – November 30. Fin (*Balaenoptera physalus*), Sei (*Balaenoptera borealis*) and Sperm (*Physter macrocephalus*) whales are also seasonally present in New England waters but are typically found in deeper offshore waters. Occurrence of these species at any of the alternative sites would be rare. It is possible that transient right or humpback whales could occur at any of the sites listed in the FR notice, including the preferred location in Nantucket Sound. However, listed whales are most likely to occur at the Nantucket Shoals and East of Nauset Beach alternative sites. The East of Nauset Beach area is also used by fin whales. The use of Nantucket Sound by large marine mammals, including the listed whales, is likely limited by the relatively shallow depths in the area.

Certain New England waters have also been designated as critical habitat for the Northern Right Whale (final rule at 59 FR 28793). The Great South Channel critical habitat is the area bounded by 41°40' N/69°45' W; 41°00' N/69°05' W; 41°38' W; and 42°10' N/68°31' W. The Cape Cod Bay critical habitat is the area bounded by 42°02.8' N/70°10' W; 42°12' N/70°15' W; 42°12' N/70°30' W; 41°46.8' N/70°30' W and on the south and east by the interior shore line of Cape Cod, Massachusetts. It appears that the East of Nauset Beach alternative site lies at least partly within the Great South Channel critical habitat area.

The sea turtles in northeastern nearshore waters are typically small juveniles with the most abundant being the federally threatened loggerhead (*Caretta caretta*) followed by the federally endangered Kemp's ridley (*Lepidochelys kempi*). Loggerheads and Kemp's ridleys have been documented in waters as cold as 11°C, but generally migrate northward when water temperatures exceed 16°C. These species are typically present in New England waters from June 1 – November 30. Federally endangered leatherback sea turtles (*Dermochelys coriacea*) are located in New England waters during the warmer months as well. While leatherbacks are predominantly pelagic, they may occur close to shore, especially when pursuing their preferred jellyfish prey. Green sea turtles *(Chelonia mydas)* may also occur sporadically in New England waters, but those instances would be rare. Sea turtles may be present while migrating or foraging at the preferred site within Nantucket Sound or at any of the alternative sites.

All marine mammals are protected under the MMPA. This includes the listed whales noted above as well as gray seals, harbor seals, harbor porpoises, common dolphins, pilot and minke whales, all of which may occur at either the preferred Nantucket Shoals site or any of the alternative sites. The East of Nauset Beach site is frequently used by minke whales. A large number of gray seals occur in Nantucket Sound, with the breeding population at Mukeget Island consisting of at least 1500 seals. If the proposed project is likely to result in the incidental take of marine mammals by harassment, an Incidental Harassment Authorization may be necessary. Please refer to NMFS Office of Protected

Resources website for more information on applying for this authorization (http://www.nmfs.noaa.gov/pr/permits/incidental.htm#iha).

The construction, operation, maintenance and decommissioning of an Offshore Wind Development project at the preferred site or at any of the alternative sites may affect the species noted above. In the EIS, MMS must fully analyze the effects of all stages of the project on these species. Based upon review of the Corps DEIS, NMFS expects that MMS will consider at least the following effects: displacement of protected species from the project site, change in species composition at the site that may affect the forage base of protected species, change in habitat structure that may affect protected species, direct and indirect effects of construction including acoustic impacts of pile driving, effects of increased vessel traffic, effects of electromagnetic and thermal emissions and the likely levels and effects of suspended solids and other pollutants. The EIS should not only describe the likely effects but analyze the impact that these effects are likely to have on protected species as well as an analysis of the cumulative impact of the project on listed species.

As you know, Section 7(a)(2) of the ESA states that each Federal agency shall, in consultation with the Secretary, insure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Any discretionary federal action that may affect a listed species must undergo Section 7 consultation. As the lead federal agency for the Cape Wind Offshore Wind Development project, MMS is responsible for determining whether the proposed action may affect any listed species and for seeking the concurrence of NMFS with that determination. If MMS determines that the project is "not likely to adversely affect" any listed species (i.e., when direct or indirect effects of the proposed project or its interdependent and/or interrelated actions on listed species are expected to be discountable, insignificant or completely beneficial) and NMFS concurs with this determination, NMFS will reply to MMS in a letter that will convey the concurrence, thus completing Section 7 consultation. If MMS determines that the project is "likely to adversely affect" any listed species (i.e., if any adverse effect to listed species may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effects are not: discountable, insignificant, or beneficial) or NMFS does not concur with MMS' "not likely to adversely affect" determination, formal Section 7 consultation, resulting in the issuance of a Biological Opinion, may be required. Any effects that amount to the take of a listed species (defined by the ESA as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct") are not discountable, insignificant or entirely beneficial. Therefore, if any take is anticipated, formal consultation is required.

MMS may prepare a Biological Assessment which analyzes the effects of the proposed project on listed species or prepare a letter which outlines which sections of the EIS constitute the agency's analysis of effects on listed species. Either document should be accompanied by a letter that includes MMS determination of effects and a request for concurrence with that determination. This package will serve to initiate Section 7 consultation and should be submitted to the attention of the Endangered Species

Coordinator at NMFS Northeast Regional Office. NMFS would then be able to conduct a consultation pursuant to Section 7 of the ESA.

Thank you for the opportunity to provide comments on this important project. Should you have questions regarding these comments, please contact Christopher Boelke at (978) 281-9131. If you have any questions regarding the MMPA or ESA, please contact Julie Crocker at (978)281-9300 x6530

Sincerely,

Peter Colosi

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